Parvati Jayakumar

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in parvati-jayakumar

• parvatijay2901

EDUCATION

University of Washington, Seattle

Sep 2023 - Mar 2025 (Present)

MS | Data Science

Grade: 3.92/4

Indian Institute of Information Technology Dharwad

Aug 2018 - Aug 2022

B. Tech. | Electronics and Communication

Grade: **4/4**

• Institute Gold Medal and Department Gold Medal for Academic Excellence

EXPERIENCE

Graduate Research Assistant

Sep 2024 - (Present)

UW Scientific Software Engineering Center, eScience Institute

Seattle, WA

- Leading the development of a **Power BI** tool and automating workflows for the UW Research Central Compliance Team, including managing financial disclosures, creating standardized documents, and streamlining processes.
- Contributing to the frontend development of a **Flutter app** for community logistics using **Supabase**, ensuring seamless functionality on linux, and macOS as a part of the <u>Post-Disaster Communications</u> project.

Data Science Intern

Jun 2024 - Sep 2024

Pearson Packaging Systems

Spokane, WA

- Developed a **Power BI tool** for the Inventory Department. The tool contributed to achieving company targets by increasing on-time delivery rates to over 95% and reducing material costs to product cost by more than 50%.
- Led the **Data Warehouse** project, successfully establishing a pilot instance and developing a comprehensive **Microsoft Fabric** implementation plan. Leveraged **Azure Synapse Analytics, Data Factory, and Data Lake Storage Gen2** for a scalable lakehouse solution, integrating seamlessly with **Power BI**.

Data Analyst November 2021 - June 2023

MiiCare

London, United Kingdom

- Analyzed health data for seniors and disabled individuals using **Python** and **Streamlit** for visualizations, enabling personalized care improvements through concise reports, developed algorithms for early detection of behavioral shifts, leading to a significant **29**% rise in customer engagement (2021 2023).
- Owned the development of MiiVoice, a voice-based mental health prediction system that uses **Speech Processing techniques**. Additionally, contributed to **NLP** projects aimed at intuition prediction and chatbot development.
- Assisted in implementing the Acoustic Gait pattern classification ML model. (BSN 2023), (arXiv.)

PROJECTS

Obesity Research and Lifestyle Recommendation Tool

GitHub-reference

University of Washington

Python, Streamlit, ML

• Designed a **Streamlit app**, integrating the contributions of all team members to create a recommendation tool that analyzes obesity trends and lifestyle factors in the U.S.

Speech-to-Text and Text-to-Speech

IEEE TENCON 2022, GitHub-reference

IIIT Dharwad

Speech Signal Processing

• Developed Hindi speech ASR and TTS systems using **Deep Learning models** (Wav2Vec 2.0, Tacotron2, Parallel WaveGAN). Fine-tuned models on labeled and unlabeled telephonic data to enhance performance.

SKILLS

- **Programming Languages:** Python (Pandas, NumPy, Matplotlib, Plotly, Seaborn, scikit-learn, TensorFlow, PyTorch), R, SQL, MATLAB, DAX, C/C++
- Business Intelligence: Power BI, Tableau
- Database Management: SQLite, MySQL, PostgreSQL, (Basic Familiarity: MongoDB, Microsoft SQL Server)
- Cloud Technologies: Microsoft Fabric, Azure (Data Warehousing components, Machine Learning)
- Other Tools: Git, GitHub, FastAPI, Streamlit, Docker, Kubernetes, Agile methodology